

Community Water Fluoridation

Yes, it's still relevant!



Objectives-

- Learn what is happening in the world of fluoride
- Understand how many Michiganders receive fluoride
- Identify the reasons why we supplement fluoride

How does fluoride work?

- Topically and Systemically
- Fluoride has 3 main functions-
 - Natural antibacterial
 - Desensitizer
 - Remineralizer

Why do we supplement fluoride?

- For our health and the benefit of all- not just those who can see a provider
- Adjusting what is already there in the water, naturally
- Cavities are not just “holes in teeth”, they are infections that cause whole body reaction

States with Fluoride Bans

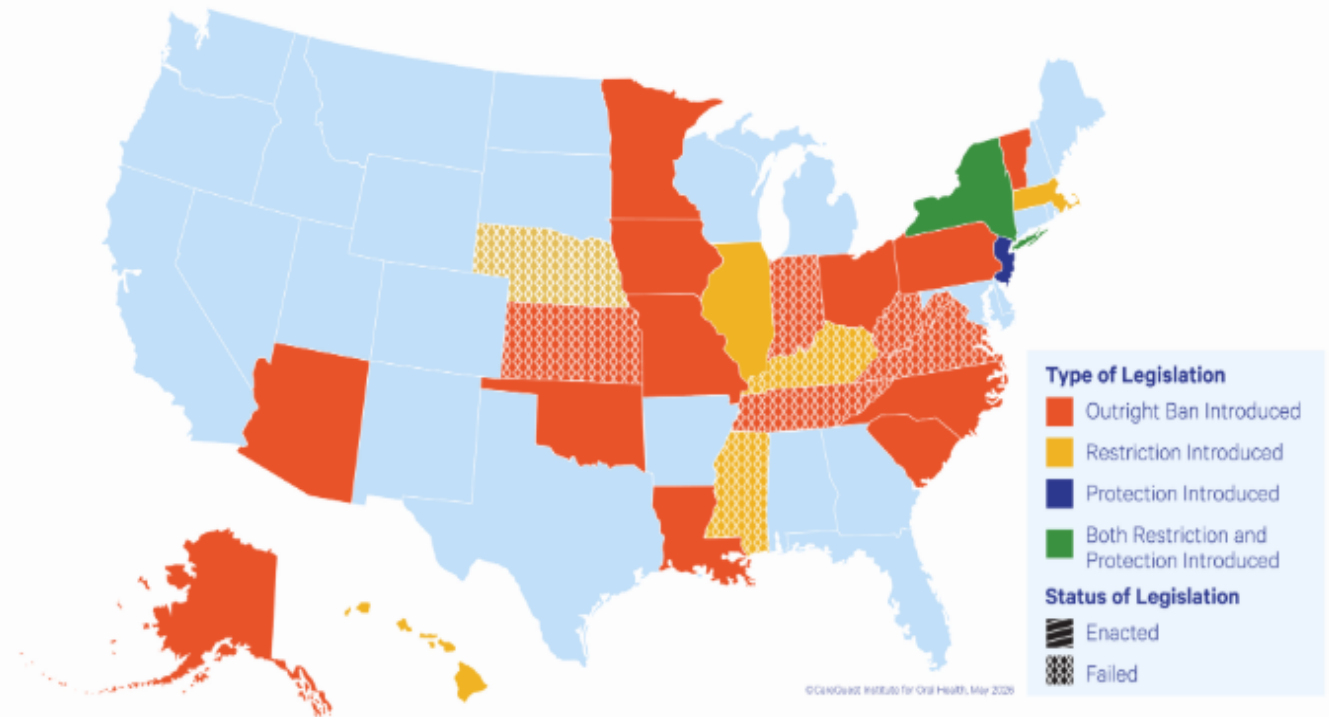
Only 2-

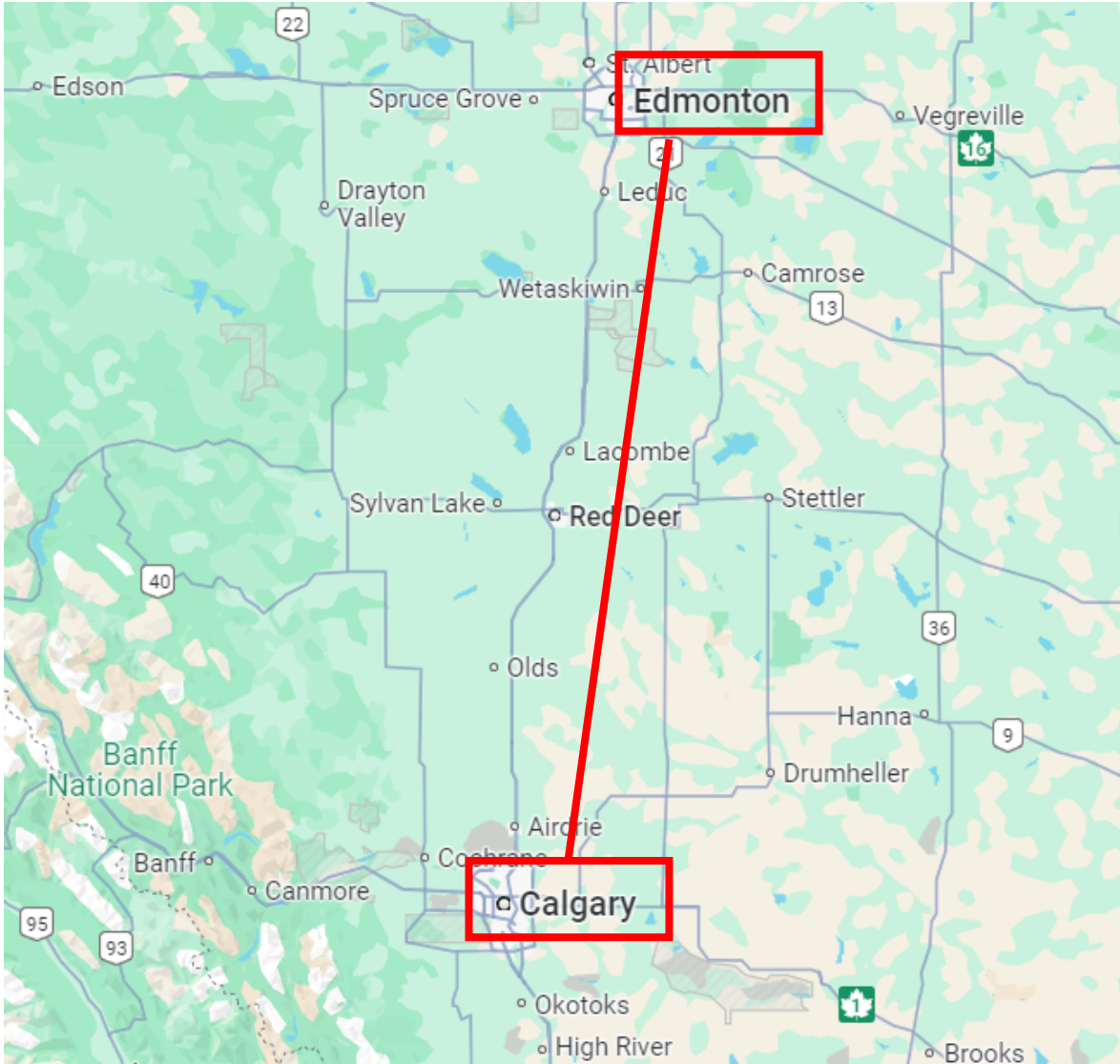
- Florida
 - 23.3 M population
 - 1614 PWS, 30 natural
 - Signed May 15, 2025
- Utah
 - 3.54 M Population
 - 498 PWS, 21 natural
 - Signed May 7, 2025

Community Water Fluoridation Policy in the State Legislatures in 2026

Despite overwhelming scientific evidence that community water fluoridation (CWF) is a safe and effective way to prevent cavities, many states introduced legislation in 2025 to restrict or ban CWF, laying the groundwork for continued action in 2026. In 2025, Florida and Utah enacted statewide bans, and similar proposals are under consideration in states across the country in 2026.

This map shows the policy landscape as of May 1, 2026.





Study on tooth decay and general anesthesia (GA) related treatment

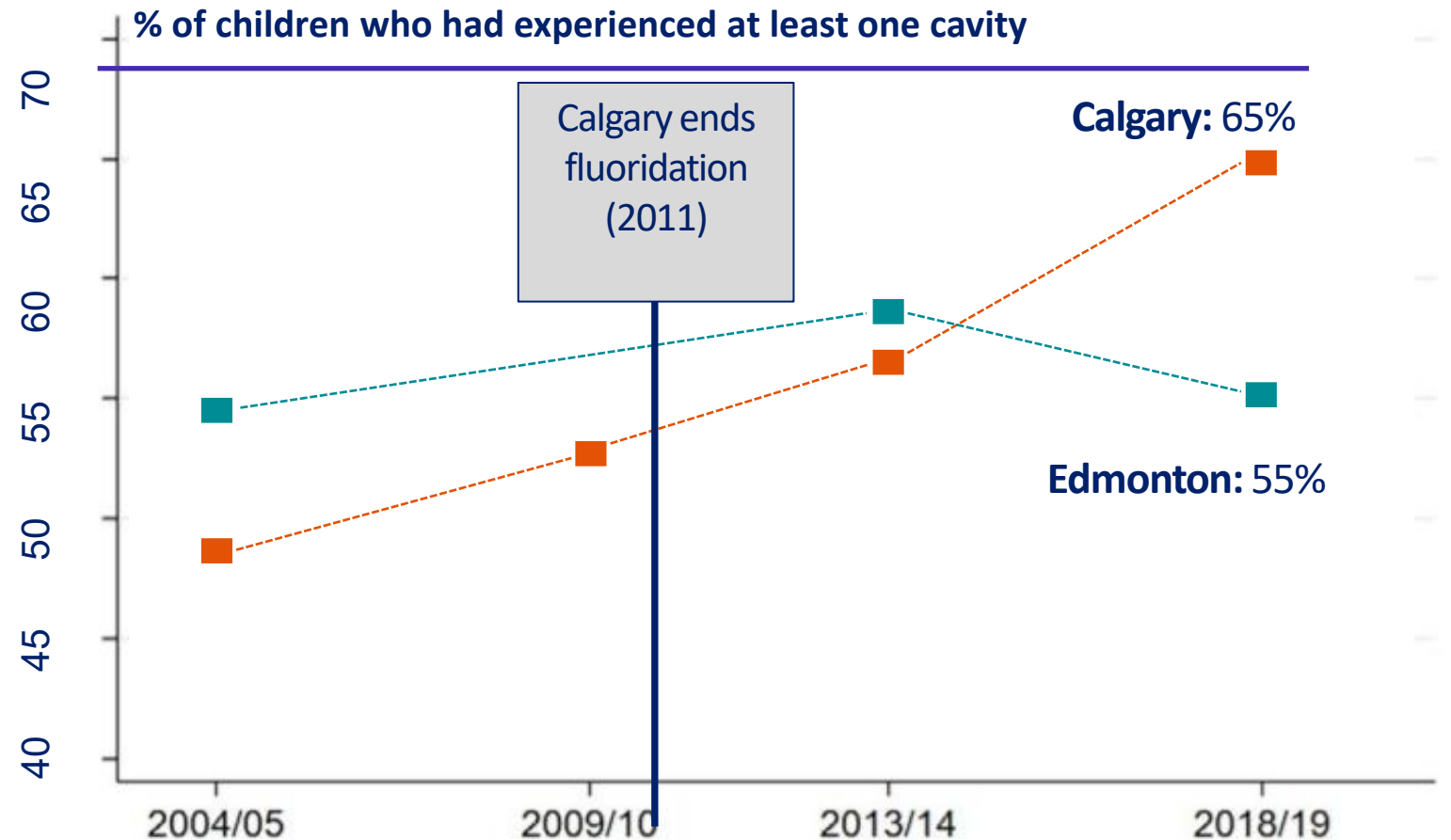
Researchers compared data for 2,659 instances of pediatric GA treatment from two cities.

- **Calgary**, one of the largest cities in Canada, ceased water fluoridation in 2011.
- But **Edmonton**, a major city to the north, has remained fluoridated for decades.

Look at what happened in Calgary

STUDY: The prevalence of cavities, extracted, missing or filled primary teeth (children in Grade 2)

■ Calgary children
■ Edmonton children



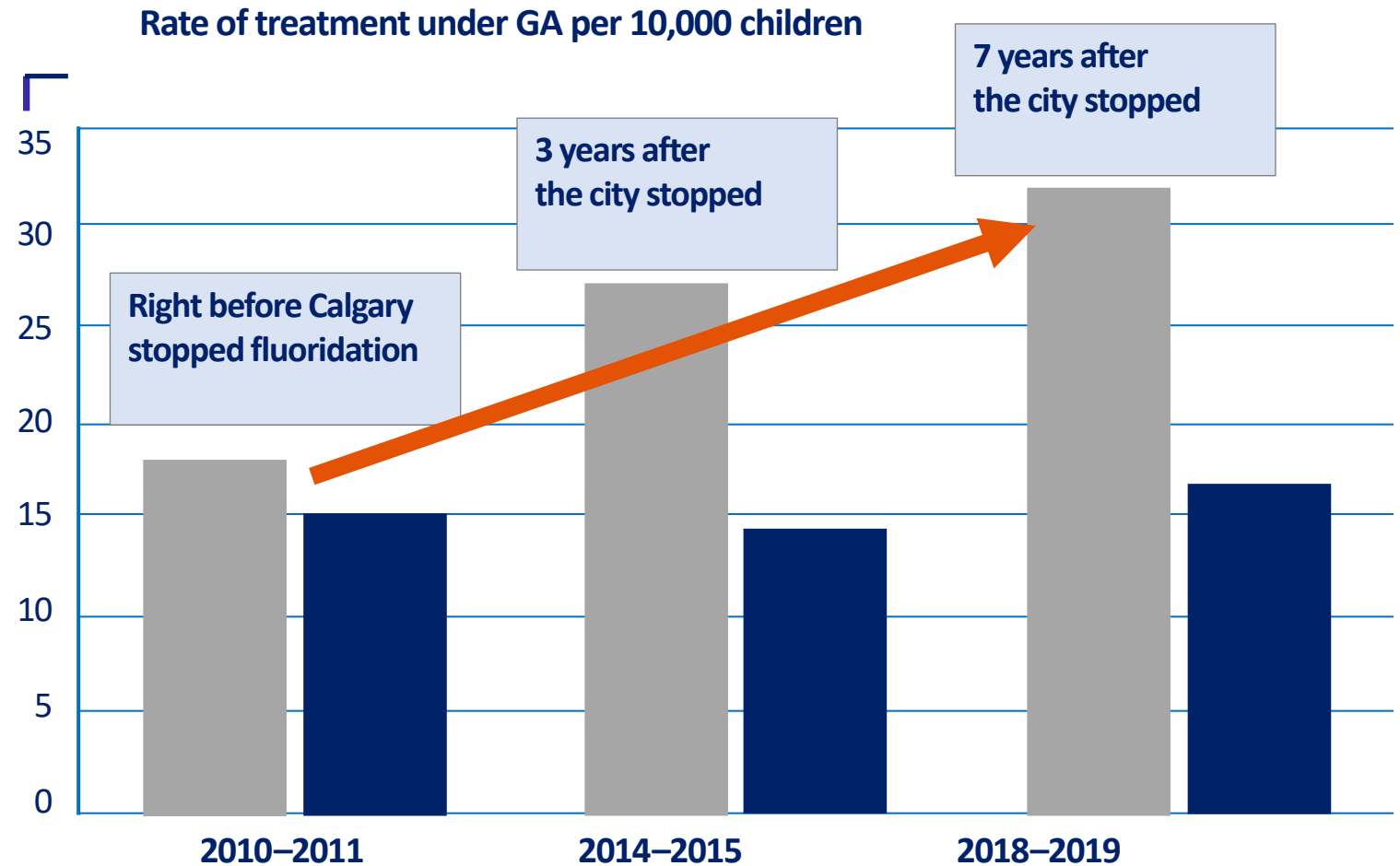
GA-related treatment rose sharply in Calgary

Fluoride toothpaste is widely used in both cities, and yet:

The GA treatment rate in **Calgary** jumped by 78%.

Edmonton's rate rose by only 13%

■ Calgary children
■ Edmonton children



(Source: Yazdanbakhsh E, et al. Community water fluoride cessation and rate of caries-related pediatric dental treatments under general anesthesia in Alberta, Canada. Canadian Journal of Public Health, 2024; the study population was children, ages 0 through 11.)

How severe decay is treated

- A toddler's teeth can begin to suffer cavities (decay) soon after they appear in the mouth. Without fluoridated water and fluoride toothpaste, a child is at greater risk.
- Toddlers and young children with severe decay may not tolerate or cooperate for treatment in a dental office. The only option to safely treat them is under **general anesthesia** (GA) in a hospital.
- GA is also very **expensive**.



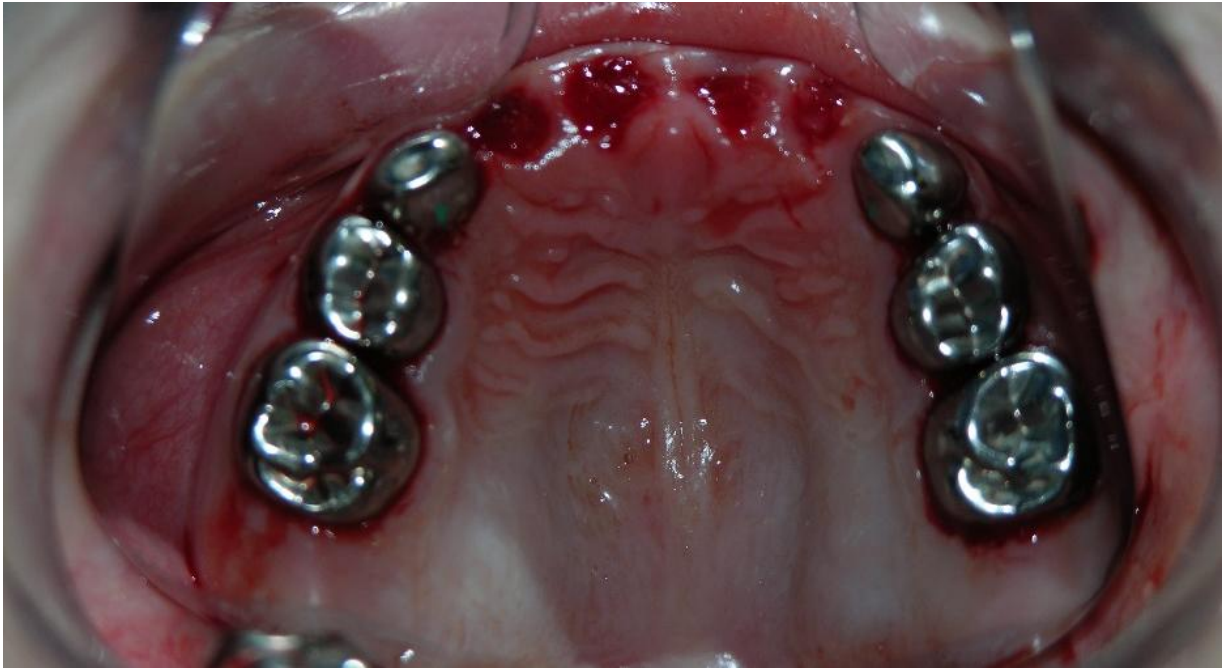
(Source: Lee HH, et al. Trends in death associated with pediatric dental sedation and general anesthesia, Paediatric Anesthesia, 2013; 23(8):741-6. doi: 10.1111/pan.12210)

How severe decay is treated

- The average cost of hospital treatment with GA ranges from **\$10,000 to \$15,000** *per child*.
- US and international studies show that water fluoridation helps **prevent 2/3rd** of hospital GA dental treatment.



(Sources: J. Daley, "Tooth Decay: A Silent Epidemic, Especially For Poor Kids In Colo.," Colorado Public Radio, March 12, 2015; An alternative marker for the effectiveness of water fluoridation: hospital extraction rates for dental decay, a two-region study, Elmer et al, British Dental Journal 2014; 216: E10; Klivitsky et al., "Hospitalizations for dental infections - Optimally versus non-optimally fluoridated areas in Israel," Journal of the American Dental Association.)



Alaska: Treatment costs soar after cessation

- Preschool-age children (under age 7) in Juneau were hard hit by dental cavities.
- After fluoridation ended in **Juneau**, preschoolers needed an average of one (1) additional cavity-related procedure *each year*.
- Meanwhile, in **Anchorage**, the average number of cavity procedures for preschool-age kids was *unchanged*.

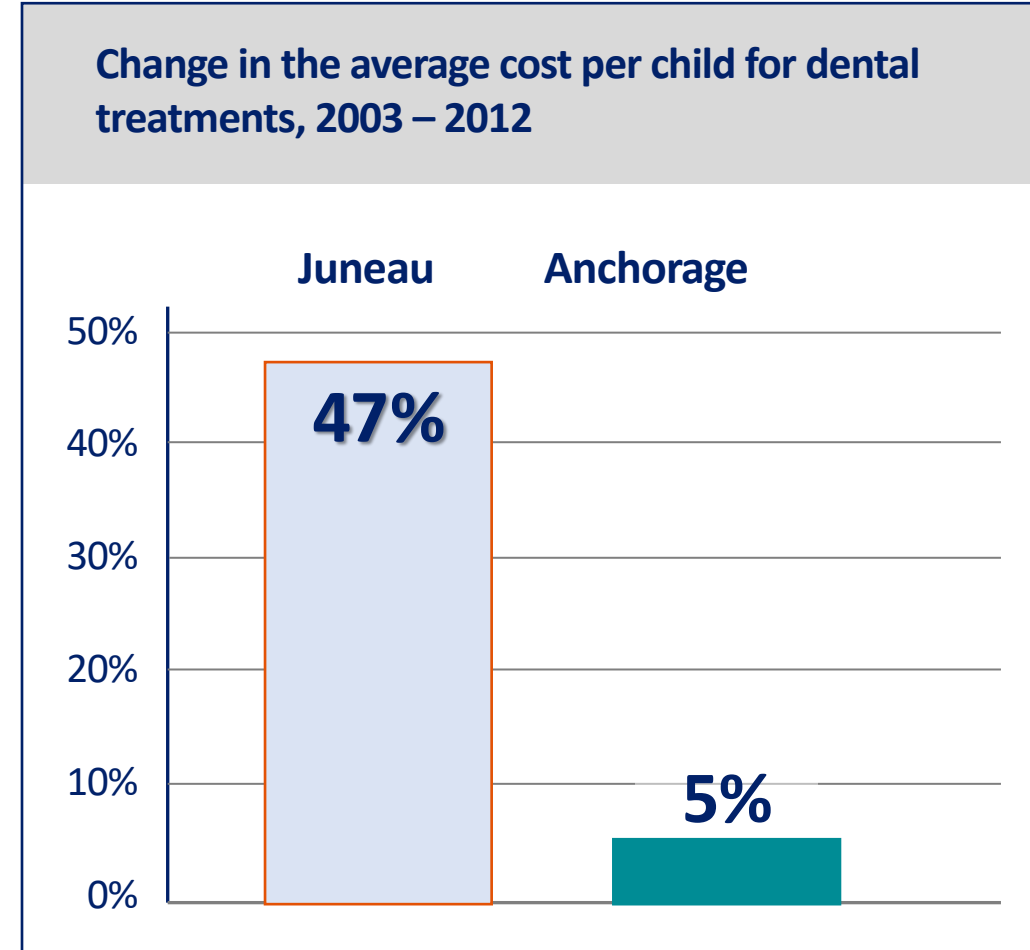


(Source: J. Meyer et al., "The Impact of Water Fluoridation on Medicaid-Eligible Children and Adolescents in Alaska," *Journal of Primary Prevention*, 2022.)

Alaska: Treatment costs soar after cessation

Anchorage, Alaska's largest city, fluoridates its tap water, but the city of **Juneau** stopped in 2007.

Nine years after Juneau stopped, this is what happened to the average cost-per-child for decay treatments.



(Source: J. Meyer et al., "The Impact of Water Fluoridation on Medicaid-Eligible Children and Adolescents in Alaska," Journal of Primary Prevention, 2022; for this bar graph, the average Medicaid costs were rounded up or down to the nearest whole number.)

Federal Court –v- EPA

- Federal court ruled fluoridation chemicals pose an “unreasonable risk” under Toxic Substances Control Act – TSCA
- Case overturned May 2026
- No immediate change at the tap, but potential for tighter national fluoride regulation

EPA

Gold Standard

EPA Document Number: EPA-821-P-26-001

- January 2026

Preliminary Assessment Plan and Literature Survey

- National Primary Drinking Water Regulations (NPDWR) under SDWA-every 6 years

EPA Discussions

Gold Standards

- 6 Year review -early
- Discussion of lowering Secondary Contamination Level- SCL 2.0ppm
- Not considering health
- Support came from AWWA, AAP, ADA, ADHA, etc. urging to consider health
- To date- no recommendations

Application of EO 14303 Tenets Throughout Systematic Review

Restoring Gold Standard Science Tenets (Sec 3 EO 14303)		Systematic Review Process						
		Problem formulation	Transparent documentation of SR processes & results	Study ID from peer reviewed literature databases	Use of studies agnostic of results	Evaluation of studies for sensitivity/ potential bias	Evidence determination framework and documentation of uncertainties	Inter-disciplinary team
I.	Reproducible	✓	✓	✓	✓	✓	✓	
II.	Transparent	✓	✓	✓	✓	✓	✓	
III.	Communicative of error & uncertainty	✓	✓	✓		✓	✓	
IV.	Collaborative & interdisciplinary	✓	✓	✓	✓	✓	✓	✓
V.	Skeptical of its findings & assumptions				✓	✓	✓	
VI.	Structured for falsifiability of hypotheses	✓			✓	✓	✓	
VII.	Subject to unbiased peer review		✓	✓	✓	✓	✓	
VIII.	Accepting of negative results as positive outcomes	✓	✓	✓	✓	✓	✓	
IX.	Without conflicts of interest			✓	✓	✓	✓	

Source: <https://www.whitehouse.gov/presidential-actions/2025/05/restoring-gold-standard-science/>



= tenet is relevant to and explicitly used in the systematic review step

FDA on Supplements

October 2025

- Ingestible Fluoride Products
- Review of literature
- Review of prescriptions
- Evaluation of who should receive supplements
- Casting negative implication

FDA on Ingestible Fluoride Supplements

- Additionally, ingestible fluoride drug products should be limited to children at high risk for tooth decay, such as those who have a history of tooth decay and lack access to fluoridated drinking water, as those who are at lower risk for tooth decay would likely gain no additional benefits while being exposed to potential additional risks. — Conclusions, Page 15
- The FDA is supporting the same recommendation that has been out for the last 25+ years-

Michigan's Fluoridation Profile

Annual Summary Report (Michigan - 2025)

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Fluoridation Status for 2025

	% Fluoridated		% of Total	
	Systems	Population	Systems	Population
All Water Systems	1,459	7,367,392	--	--
Fluoridated				
Adjusted	123	2,756,243	20.16	41.44
Natural	237	138,825	38.85	2.09
Variable/Other	0	0	0.00	0.00
Defluoridated	0	0	0.00	0.00
Consecutive	249	3,753,303	40.82	56.43
Multi-source	1	2,599	0.16	0.04
Total	610	6,650,969	99.99	100.00
Non-Fluoridated				
Non-Adjusted	815	685,383	--	--
Variable/Other	0	0	--	--
Defluoridated	0	0	--	--
Consecutive	34	31,040	--	--
Multi-source	0	0	--	--
Total	849	716,423	--	--

90.27% of the population on a CWS receives fluoride

123 Systems supplement fluoride and sell to 249 other systems

237 are naturally fluoridated

WFRS

Operational Summary for All Water Systems for 2025



			% Fluoridated		% of Total	
	Systems	Population	Systems	Population	Systems	Population
Non-optimally Fluoridated						
Non-Fluoridated						
Total	849	716,423	--	--	58.19	9.72
Fluoridated - not optimal						
Adjusted	7	52,326	1.15	0.79	0.48	0.71
Consecutive	28	283,208	4.59	4.26	1.92	3.84
Multi-source	1	2,599	0.16	0.04	0.07	0.04
Total	36	338,134	5.90	5.09	2.47	4.59
Optimally Fluoridated - Partial						
Adjusted	57	840,375	9.34	12.64	3.91	11.41
Consecutive	43	248,024	7.05	3.73	2.95	3.37
Multi-source	0	0	0.00	0.00	0.00	0.00
Total	100	1,088,400	16.39	16.37	6.86	14.78
Optimally Fluoridated						
Adjusted	59	1,863,541	9.67	28.02	4.04	25.29
Natural	237	138,825	38.85	2.09	16.24	1.88
Defluoridated	0	0	0.00	0.00	0.00	0.00
Consecutive	178	3,222,070	29.18	48.45	12.20	43.73
Multi-source	0	0	0.00	0.00	0.00	0.00
Total	474	5,224,436	77.70	78.56	32.48	70.90

Not an enforceable law

How can we hold cities or water systems accountable to uphold a vote of the people?

Recent Action in Michigan



- **Ishpeming & Negaunee:** Held public hearings; chose to continue fluoridation
- **Wyandotte:** Oct. 22 commission vote 2–2, no resumption of fluoridation
- **St. Clair County:** Advisory Board of Health voted to support drafting regulations to prohibit fluoridation at local plants
- **Carson City:** Recently removed fluoride
- **Three additional communities:** Seeking grants to replace/upgrade equipment: Munising, Lowell and Battle Creek
- **Hillsdale and Ironwood:** Both held hearings, both will continue to fluoridate



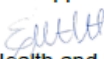
STATE OF MICHIGAN
DEPARTMENT OF
ENVIRONMENT, GREAT LAKES, AND ENERGY
AND
DEPARTMENT OF HEALTH AND HUMAN SERVICES

ELIZABETH HERTEL
DIRECTOR

GRETCHEN WHITMER
GOVERNOR

PHILLIP D. ROOS
DIRECTOR

TO: Michigan Community Water Supplies

FROM: Elizabeth Hertel, Director 
Michigan Department of Health and Human Services

Phillip D. Roos, Director 
Michigan Department of Environment, Great Lakes, and Energy

DATE: March 20, 2025

SUBJECT: Fluoridation of Public Drinking Water

The purpose of this memorandum is to provide clarification on the status of drinking water fluoridation in the state of Michigan and to assist water supplies with fluoride-related communication in your communities. The Michigan Department of Environment, Great Lakes, and Energy (EGLE) and the Michigan Department of Health and Human Services (MDHHS) continue to support the practice of fluoridating public drinking water for the purpose of promoting oral health. **No adverse health effects have been associated with consuming water fluoridated at levels currently recommended; and fluoridation benefits everyone in the community, including seniors, adults, and children.** EGLE and the MDHHS are committed to acting on current facts and relying on the expertise of public health organizations and agencies that look at the complete body of evidence, including peer-reviewed systematic studies, to develop national recommendations.

Background

Michigan led the world with the first city to fluoridate drinking water (Grand Rapids in 1945). After seeing the compelling evidence of fluoridation effectiveness in Grand Rapids, many other Michigan and American communities chose to fluoridate. Estimates as recent as 2022 indicate that nearly three out of four Americans served by public



American Water Works
Association



ASSOCIATION OF
METROPOLITAN
WATER AGENCIES

February 26, 2026

Jessica Kramer
Office of Water
Environmental Protection Agency
Mail Code: 4601M
1200 Pennsylvania Ave. NW
Washington DC 20460

SUBMITTED ELECTRONIALLY

RE: AWWA and AMWA Comments on "Review of Science on Fluoride in Drinking Water: Preliminary Assessment Plan and Literature Survey" ([EPA-HQ-OW-2025-3823](#))

Dear Assistant Administrator Kramer,

The American Water Works Association (AWWA) and the Association of Metropolitan Water Agencies (AMWA) appreciate the opportunity to comment on the Environmental Protection Agency's (EPA's) "Review of Science on Fluoride in Drinking Water: Preliminary Assessment Plan and Literature Survey" (Assessment Plan). With its potential to inform future revisions to drinking water standards for fluoride under the Safe Drinking Water Act (SDWA), this action has the potential to impact many public water systems. Many, if not most, of those systems will be small water systems that have naturally occurring fluoride in their source water.

All water systems, regardless of size, strive to provide safe and reliable water supplies to the households they serve. Limited local resources must be used cost effectively to best protect public health. Poor science policy can interfere with local spending priorities well before there is a final federal risk

Pull up the CWF
Toolkit-

<https://mohc.org/cwf-toolkit>

Community Water Fluoridation Toolkit:

Resources for Assessment,
Communication, and
Sustainable Policy

2025



Multi function-

How to Use This Toolkit

Multiple audiences—including policymakers, advocates, technical experts, and community members—can use each section independently or as part of a step-by-step process.



Public Outreach Materials

includes original resources, such as social media guides, op-eds, template letters, position statements, Q&A items, and reframed technical language, to help communities communicate clearly and effectively about fluoridation.



Community Assessment Tools

explains how to determine whether a community's water is fluoridated, whether the levels meet recommended standards, and how to engage partners in reviewing the results.



Educational Resources for Advocates

provides evidence-based messages and resources that build understanding and trust in fluoridation.



Communication Tools

offers practical strategies, templates, and talking points for sharing accurate information across different audiences.



Best Practices

highlights lessons from successful communities and strategies for building coalitions and responding to challenges.



Policy Guidance and Sustainability

outlines approaches for protecting CWF through laws, governance, and long-term planning.



Conclusion and Next Steps

summarizes key goals, provides resources for ongoing support, and suggests immediate actions communities can take.



Still have questions?

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